

### **Amendments to the Abstract**

Please add the following abstract on a separate sheet:

#### **Abstract**

##### **Functional Screening Method**

The present invention provides high-throughput functional genomic methods for determining gene and protein function in a cellular context. Also provided are methods for identifying chemical modulators of gene and protein/enzyme activity. Assays are generated in concert with screening in an iterative process which expands the scope of biological coverage with each iteration and which uses image-based analysis to yield data at sub-cellular resolution.